FALL / WINTER • 2024 - 2025

THE POLAR TIMES

THE JOURNAL OF THE AMERICAN POLAR SOCIETY





PRESIDENT'S MESSAGE



Dear Polar Times Readers: As I mentioned in our last edition that it might be time for me to move along, and as predicted, I have stepped down from my position and we have a new Acting President, Susan Adie. These are interesting times on the polar fronts, so the American Polar Society will

be facing new challenges, in our role of keeping those of us interested in the northern and southern latitudes informed and aware of the challenges facing us all.

Susan will introduce herself in the following column, but I will simply say she has a solid background in the polar regions, having led groups of interested parties to those regions above and below the 60 degrees circles for many decades. She knows the polar world well and looks forward to leading the APS.

For my part, I have to say that things are not looking very positive politically on the global front, but that those of us interested in polar affairs need to keep working to keep cooperation in the scientific and environmental areas on an even keel.

After the pandemic, the main international organizations focusing on polar matters, such as the Antarctic Treaty, the Arctic Council, and Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), have returned to their regular schedules for meetings. This is good news, since the polar areas have always been areas of positive international relations- stressing cooperation, avoiding military conflicts, and encouraging everincreasing exchanges and sharing of ideas. Let's all do our part to hold that ideal.

As your readers know, the American Polar Society is the only nongovernmental organization which focuses both poles, offering members a broad range of environmental, conservation and social issues, which engage all of us.

So, with those words of farewell, after my years of service, I hand the gavel to Susan, with best wishes for spreading the word of peace and cooperation in the Polar Regions.

Sincerely, Ray Arnaudo President Emeritus

Ray, the Board and Members of The American Polar Society give thanks for all your years of service to the polar regions as well as The Society. We wish you the best in the years ahead. You may have changed your position; however, we will lean on you for future guidance and assistance as we move forward to the next 90 years of our Society.

INTRODUCING OUR NEW (ACTING) PRESIDENT



It is an honor to have been asked to accept the role as Acting President of The American Polar Society. As a member of The American Polar Society, I have participated in several APS Conferences. I presented at the Ohio Conference on the topic of tourism to Antarctica. And now I have the opportunity to

step up and participate in an even greater capacity.

For the last 30 years I have worked in the private sector as a naturalist, lecturer, expedition leader, and later as Expedition Operations Manager, to enhance the visitor experience to the Arctic and Antarctica. It was my responsibility to hire and train competent expedition staff, officers and crew. In this role it was my commitment to ensure that company operations were environmentally and culturally sound. Professionally, my objective was to enhance visitors' experiences while visiting our Polar Regions. This personal goal has embraced my understanding and respect for the people of the Arctic, while gaining a greater education and respect for Polar science and scientists. The result of which has led to my desire to stewardship not only the environment, but also that of the people. Working collaboratively to share knowledge and experiences is critical.

While the number of people who have had the opportunity to explore the Polar Regions has increased dramatically in the 90 years since the founding of the American Polar Society – our membership has not expanded exponentially.

It is the goal of The American Polar Society and the Board of Governors to change that dynamic.

As Acting President, I acknowledge we "the Society" have our work cut out for us. As we transition from Raymond's leadership, we need to expand our focus on the organization. At recent Board Meetings we established immediate, as well as near future goals. We will be enhancing our web page to allow easier access as well as sharing current information in a timelier manner. We will be focused on membership to not only meet our current members' needs but also grow our membership.

Our future direction needs to be led by members who can enhance the opportunities to influence the future of the Polar environments; environments, the people, as well as the science, and security of the Polar regions. Together, we have room to grow and expand our influence for the future of these regions we are passionate about.

Realizing that it takes persistence and focus means we collectively, as a society, both leadership and membership, must rise to meet these challenges. I ask our members and readers of *The Polar Times*, to seek additional members and further our efforts in celebrating the only organization that formally acts as a steward towards furthering the stability of the Polar Regions and their importance in our ever-changing world.

Warm regards, Susan Adie



The American Polar Society was founded on November 29, 1934, to band together all persons interested in polar exploration.

Members are entitled to receive *The Polar Times* twice a year. The American Polar Society is classified as a tax-exempt organization under Sec 501 (C)3 of the IRS Code.

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LETTER FROM THE EDITOR



Wow, there is a lot to report since our last issue of *The Polar Times*! Your Board of Directors of The American Polar Society has been very busy.

Some highlights include personnel changes. You will notice Ray Arnaudo is trying to seek a quieter retirement; his position has been filled by Susan Adie. She also has had a long career associated with the polar Areas.

By the time our next issue of *The Polar Times* is published, members should notice our website will have been revamped. This has been a much-needed project since The American Polar Society has ramped up post COVID activity.

Members will also notice a Membership Drive to continue to grow our Society. I encourage each and every member to reach out to family members and friends to encourage them to join The American Polar Society. If every member could encourage just one other person to join, we would double our membership! The Holiday Season is soon upon us. A membership makes a GREAT unique gift idea for those difficult to shop for people on your gift list who "have everything."

Lest we not also forget about what is happening on a global scale. Wars, climate and environmental changes, avian flu affecting wildlife, natural disasters, political unrest – these all affect the mission and advocacy of APS to protect the polar areas. It takes a whole team to help with our mission. Please consider getting more involved with the Society; volunteer on a committee; assume a position on the Board; and enhance your financial giving to assure a bigger and better next 90 years of the Society!

Larry Rechlin Editor



FEATURED PHOTOGRAPHER JOHN WELLER

John Weller is a critically acclaimed photographer, writer and filmmaker based in Boulder, Colorado. Nature photography has been his passion since childhood, and

after graduating from Stanford University with a degree in Economics, John began pursuing media full time. He spent two years in California working for photographer William Neill and then moved home to Colorado, where he fell in love with Great Sand Dunes National Park. For one week of every month for more than three years, he walked with a 120-pound pack, deep into the extraordinary landscape. With each trip, he further understood interconnections within the ecosystem, including his own. His goal solidified — to communicate the value of pristine places, reminding people we are part of the same living system. www.johnbweller.com

John is featured on our Photo Essay (page 10). In addition, John's photography is displayed as our cover-wrap, both front and back inside covers and many of his other stunning photos scattered throughout.

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 Andrés Paredes



MEET YOUR BOARD



The Leadership of the American Polar Society is comprised of the President, two Vice Presidents, Secretary, Membership Director, Treasurer and Corporate Relations Director, plus four Board Members and now seven Emeritus Members. This is the third article regarding Board Members.

Hon. Mead Treadwell Board Member

Former Alaska Lt. Governor Mead Treadwell (elected with Gov. Sean Parnell, 2010-2014), was appointed to the United States Arctic

Research Commission (USARC) by President George W. Bush in 2001 and served as Chair of the Commission under Presidents Bush and Barak Obama from 2006-2010. Prior to these assignments, he'd played an active role in the development of pan-Arctic cooperation as a Deputy Commissioner of Environmental Cooperation in Governor Walter J. Hickel's cabinet, 1990-1994, co-founder of the Siberian Gateway Project which advocated opening the Alaska-Chukotka border in 1988, as Managing Director and later Senior Fellow of the Institute of the North, 1997-2010.

His tenure at USARC included gaining funds to map the US Extended Continental Shelf Claims, building ties between the Study of Environmental Arctic Change (SEARCH), and the national climate research program, advocating for language preservation research in the Arctic, and funding the Arctic Council's eight-nation Arctic Marine Shipping Assessment. He also established, with two Presidential science Advisors, a coordination position for Interagency Arctic Research Policy Committee (IARPC) at Office of Science and Technology Policy

(OSTP). He assisted in drafting the US Arctic Policy signed out by President George W. Bush and implemented by President Barack Obama in 2009.

Treadwell is a co-founder of the Prince William Sound Science Center, a founding manager and a co-founder of the Wilson Center's Polar Institute. In business, he has helped found a number of technology, energy, and finance companies; several that were publicly listed or sold to global firms. He is a chair of the satellite firm Iridium's Polar Advisory Board.

He is an avid skier, Arctic Explorer (Fellow National and Emeritus Board Member of the Explorers Club), father of four children, and husband to librarian Virginia Clay McClure. His degrees are from Yale (BA), Harvard (MBA), and the University of Alaska Fairbanks (Doctorate, Sciences, Hon.). In 2024 he was awarded the Order of the Rising Sun with Gold Rays and Neck Ribbon by the Government of Japan for work in building US Japan Arctic cooperation.

As a board member of APS, he is interested in building and maintaining networks of Arctic and Antarctic explorers and scientists. He believes APS has the longest continuity in this area and can have an expanding role in education about change — opportunity and challenge — in the polar regions.



POLAR TIMES ANNOUNCEMENT

CALL TO ACTION Your Chance to Get Involved!



Admiral Richard E. Byrd Explorer

THE POLAR REGIONS

Initially, unknown and uncharted.

Known now as harbingers of a rapidly changing climate.

The American Polar Society was there at the beginning and continues to illuminate the mysteries and mystique of the Arctic and Antarctic.

But we now need your help.



Dr. Lonnie G. Thompson Paleoclimatologist

When Admiral Byrd staffed an expedition, he turned to a roster of naval reservists.

Dr. Thompson enlisted eager graduate students. The American Polar Society, however, must rely on our membership.

Please consider taking a more active role in your Society. We have openings for a *Webmaster* and a *Secretary* of the Board of Directors. We're also seeking new Board members and Committee members.

Interested? Please contact Larry Rechlin, Editor, Irapseditor@gmail.com

Founded in 1934, we're ten years from our centennial. Help us make the next decade the most dynamic in our history!

SPOTLIGHT



Dr. Mike Sfraga Confirmed as US Ambassador-at-Large for Arctic Affairs

Congratulations to Dr. Mike Sfraga on his confirmation as the first US

Ambassador-at-Large for Arctic Affairs.

The Office of the Ambassador-at-Large for Arctic Affairs leads and coordinates the advancement of US interests in the Arctic related to safety and security, sustainable economic growth, and strengthening cooperation among Arctic States to perpetuate and defend the rules-based order in the region.

As Chair and Distinguished Fellow of the Wilson Center's Polar Institute, of which he is the founding Director, Dr. Sfraga has played a pivotal role in shaping conversations on the Arctic's geopolitical, environmental, and economic future. Dr. Sfraga brings a wealth of experience to this role, having served as

Chair of the US Arctic Research Commission, and as an affiliate professor at the International Arctic Research Center at the University of Alaska Fairbanks.

Sen. Lisa Murkowski (R-Alaska) described Ambassador Sfraga as an "accomplished geographer, researcher, and teacher, with a PhD from the University of Alaska."

Sen. Murkowski commended Sfraga's "decades of experience, deep expertise, and strong relationships with Arctic leaders," adding that, "our allies support him, our Arctic partners support him, Alaskans support him, and I support him."

His confirmation on September 24, 204 underscores the critical importance of the Arctic to the United States and the world.



NEW WORLD ORDER

American Polar Society
Officer and Board Member **Dr. Lawson W. Brigham**Named High North Hero 2024

Special to The Polar Times

Dr. Lawson W. Brigham, Acting Vice President and a long-time member of the Board of Governors of the American Polar Society, was named the 2024 High North Hero, an honor bestowed by the High North Center for Business and Governance at Nord University. Dr. Brigham was the seventh recipient of the award, first conferred in 2016 on Paavo Lipponen, a former Prime Minister of Finland.

Lawson was honored "for his groundbreaking contributions to Arctic maritime policy and his lifelong commitment to polar research and governance, including his work on improving Arctic shipping safety and his leadership in the Arctic Council's Arctic Marine Shipping Assessment." Nord

ABOUT THE HIGH NORTH HERO AWARD

Every year, the High North Center for Business and Governance at Nord University Business School awards the High North Hero prize to a person or organization contributing to development and growth in the Arctic. The award consists of NOK 50,000 and the award is conferred in relation to the international conference High North Dialogue, which takes place in Bodø. Nordland County funds the award.

University is located just above the Arctic Circle in Bodø, Norway. Dr. Brigham received the award at the Arctic Congress, an annual event that convened in Bodø from May 29 through June 3, 2024.



The Award of High North Hero 2024 was given to Dr. Lawson W. Brigham by Secretary General for the Arctic Mayors forum, Patti Bruns.

Patti Bruns, Secretary of the Arctic Mayors' Forum, described the Lawson Brigham as a man whose career has been marked by "ground-breaking contributions to Arctic policy".

Bruns in her speech stated, "he has been a key leader in improving the knowledge, safety and governance of Arctic shipping. The Arctic Hero of 2024 has also actively contributed to private sector efforts by sharing his vast knowledge with the improvement of the Arctic shipping community."

Catching Up with Our Own High North Hero

By Sheldon Bart

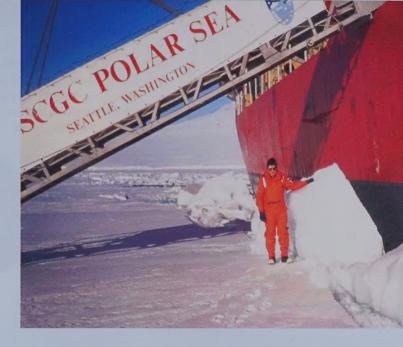
Lawson Brigham, a mainstay of the American Polar Society since 1989, was astonished to open an email one day from Frode Mellemvik, Director of the High North Center for Business and Governance, asking if he would accept the High North Hero Award for 2024. "I was quite stunned and thought it was pretty amazing," he said.

As the award signifies, Lawson's career has been equally amazing. He has served as a Distinguished Professor of Geography and Arctic Policy at the University of Alaska, Fairbanks; a Senior Fellow at the Institute of the North, Alaska's center for Arctic policy; a Research Fellow at Woods Hole Oceanographic Institution; a Global Fellow at the Wilson Center, a nonpartisan council chartered by Congress; and Deputy Director of the US Arctic Research Commission, an independent federal agency advising Congress and the President.

And that impressive academic resume followed a successful military career in the U.S. Coast Guard after graduation from the Academy in 1970.

Lawson commanded four Coast Guard cutters on operations on the Great Lakes, in the Atlantic and Caribbean, and to both polar regions. In July and August 1994, as Captain of the icebreaker *Polar Sea*, he pioneered the first major scientific crossing of the Arctic Ocean, sailing in company with the Canadian Coast Guard's *Louis S. St-Laurent*. The *Polar Sea* and *St-Laurent* were the first surface ships to cross the Arctic Ocean via the North Pole (sailing from Bering Strait to the North Pole and out through Fram Strait), essentially following the track of Roald Amundsen's airship *Norge* some 68 years earlier. The joint American - Canadian Arctic Ocean Expedition also recorded the first circumnavigation of North America and Greenland by surface ships. All told, Lawson has participated in fifteen Arctic and Antarctic expeditions.

Transitioning from the military to an academic milieu was almost as challenging as negotiating sea ice. "One day you're a captain being saluted by all hands," Lawson said, "the next you're being scrutinized by students and faculty." Having picked up a doctorate at Cambridge University's Scott Polar Research Institute, however, enabled him to hold his own among many researchers. In fact, the conning tower had the advantage over the ivory tower in certain respects. Lawson



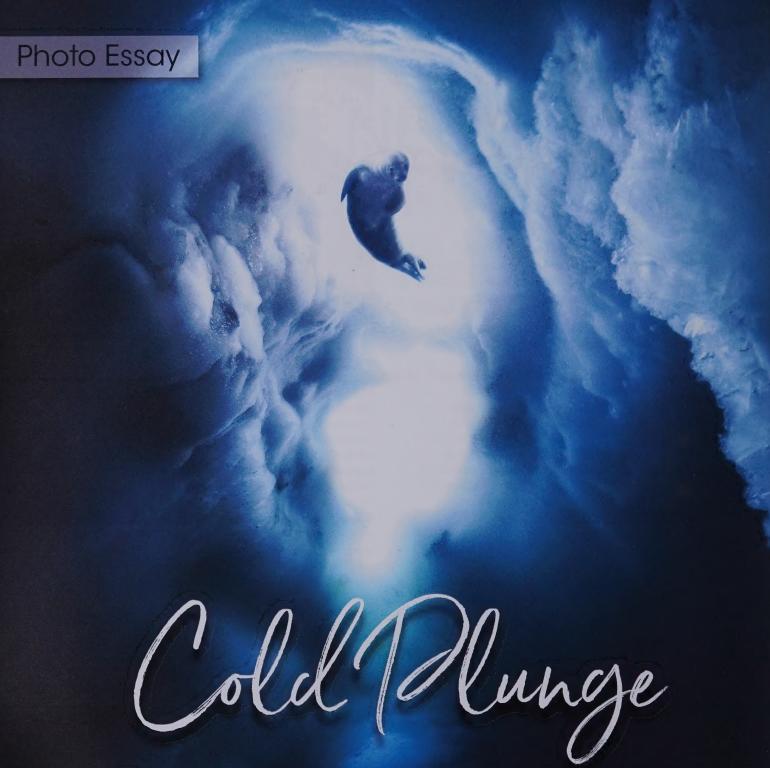
had the polar maritime experience and practical knowledge of the Arctic Ocean to weigh in on complex policy issues that might challenge many researchers. He knew, for example, that marine insurers had not caught up with the surge in cruise traffic. The insurers wanted to know what he knew about the polar seas. He was consequently instrumental in creating for the governments of Arctic states a policy framework for managing marine safety in Arctic waters as well as protecting that fragile environment.

Shaping measures and policies to protect the marine environment, the peoples of the north, and the peaceful traverse of the high latitudes remain his passion, especially the latter. "If we humans are shooting at one another in the Arctic," he said, "the entire globe will be in a heap of trouble."

Lawson's particular niche in the American Polar Society has been chairing the APS Honors Program, our own efforts to extend recognition to those who have made notable contributions to polar affairs. The most recent recipients of the APS Polar Medal have included the eminent oceanographer Dr. Walter Munk and leading European glaciologist Dr. Julian A. Dowdeswell.

As for our High North Hero's personal heroes, Lawson names Rear Admiral Edward "Iceberg" Smith, USCG (1889-1961), a polar explorer and oceanographer who commanded the Greenland patrol during World War II; Commander William R. Anderson, USN (1921-2007), then skipper of the first submarine to successfully cross the North Pole underwater; and Commander (later Vice Admiral) James F. Calvert, USN (1920-2009), captain of the first submarine to surface through the sea ice at the North Pole.

Another on his list is Vice Admiral Lawson P. "Red" Ramage, USN (1909-1990). "I've always been fascinated with Admiral Ramage," he said. "He was a highly decorated submarine commander in the Pacific theatre during World War II and a Medal of Honor winner. And not only that – I've rarely encountered, in the military or elsewhere, anyone who shares my first name!"



The photography of John B. Weller

John B. Weller is a writer, photographer and filmmaker who works to drive marine conservation around the world. In 2004, he and Antarctic ecologist David Ainley founded *The Last Ocean Project* – the first dedicated campaign for a marine protected area of the Ross Sea, Antarctica – and co-founded *The Last Ocean Charitable Trust* with New Zealand filmmaker Peter Young in 2007.

eller's photographs of the Ross Sea became the face of Antarctic conservation efforts worldwide, featured in more than 1,000 publications, including an acclaimed book, *The Last Ocean: Antarctica's Ross Sea Project: Saving the Most Pristine Ecosystem on Earth*. His publications, photography reaches an I audience totally more than a billion people. *The Last Ocean Project* helped found and build what would become a global coalition of organizations, scientists, diplomats and more than a million people, and eventually entrained the attention of world leaders.

Weller has also co-shot, directed, and produced three feature-length documentaries and more than 50 short environmental films in the last ten years from Antarctica to the jungles of West Papua. His latest series of films, *Science in Antarctica*, provides a window deep into how changes in Antarctica will impact the globe.

Weller was named a SeaWeb Fellow in 2005, a Pew Fellow in Marine Conservation in 2009, and served as a Safina Center Fellow from 2014-2018. He continues to work in defense of the ocean as a senior colleague at Only One alongside a team of close collaborators and his wife Cassandra Brooks.







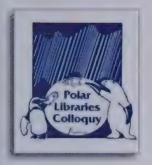










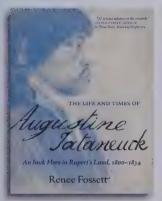


Polar Libraries Colloquy

2024 Winner Announced of William Mills Prize for Non-Fiction Polar Books

By Julia Finn, Coordinator Polar Libraries Colloquy's William Mills Prize for Non-Fiction Polar Books

The Polar Libraries Colloquy is pleased to announce the winner of the 2024 William Mills Prize for Non-Fiction Polar Books is *The Life and Times of Augustine Tataneuck: An Inuk Hero in Rupert's Land, 1800-1834* by Renee Fossett (published by the University of Regina Press).



Augustine Tataneuck, an Inuk
Hudson's Bay Company interpreter/
hunter employed at Fort Churchill,
accompanied John Franklin's two
eventful Arctic overland expeditions
of 1819-1822 and 1824-1827.
These expeditions were both part
of an effort by the British Admiralty
to chart a northwest passage from
the Atlantic Ocean to the Pacific.
Tataneuck distinguished himself in
the eyes of expedition officers who

later recorded his name and accounts of his valued participation within the historical record. This ensured that he acquired a kind of recognition generally unknown to hundreds of individuals who also hunted, translated, and laboured in the fur trade within Rupert's Land during the 19th century. Still, while charitable, accounts of Tataneuck's prowess, his endurance, and skill tended to the brief. There was clearly more to the industrious and talented Augustine Tataneuck.

Historian and author Renee Fossett initially encountered Tataneuck in 1989. She was then engaged in research about westering Inuit trade routes. However, in the process of working her way through the original Hudson's Bay Company journals for Fort Churchill, she was increasingly intrigued by references – some as early as 1812 – to Tataneuck, "a lad" working as a fur trade apprentice. Inevitably, Fossett began tracking Augustine's movements and adventures across time – month by month and year by year – until finally deciding that she wanted to write his story. Moreover, she "... wanted Canadians everywhere and anywhere to know about him."

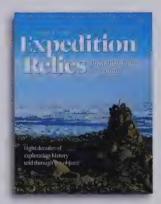
Tataneuck left no personal diaries and no letters. His birth and death were not included in the public record. Creating his story therefore necessitated building a yearly chronological narrative with information laboriously gleaned from period journals, account books, correspondence, expedition narratives, and many other contemporary sources.

Fossett utilizes Tataneuck's experiences to enhance the reader's understanding of the lives of other men and women, not themselves among the ruling elites, who laboured in various

forms and who played a salient role in the development of a growing economy based on the fur trade: Inuit, Cree, and Chipewyan hunters (and their wives and children), Royal Navy seamen and marines, Scots employed by the Hudson's Bay Company officers, and French and Metis voyageurs.

In *The Life and Times of Augustine Tataneuck*, author Renee Fossett has skilfully and comprehensively introduced an Inuk interpreter/hunter as an important actor on a vast stage where "the struggle for possession of northwestern North America by Britain, Russia and the United States" was played out.

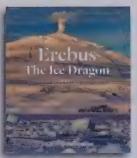
Two other nominations were awarded honorable mentions:



Expedition Relics from High Arctic Greenland: Eight Decades of Exploration History Told Through 102 Objects by Peter R. Dawes (published by Museum Tuschulanum Press).

Peter Dawes' book Expedition Relics from High Arctic Greenland beautifully and succinctly lays out the panorama of European and American exploration history in Greenland

from 1853-1934. The book's production is first class. Descriptions of the objects place them in context with the expedition, the time and the personalities who used them. Expedition records and photographs are included. This book makes exploration and expeditions of another time come alive and highlights the critical role the Inuit played in those endeavors.



Erebus The Ice Dragon:
A Portrait of an Antarctic Volcano
by Colin Monteath (published by
Massey University Press).

The subject of Colin Monteath's book Erebus The Ice Dragon is Antarctica's only active volcano. Mount Erebus has loomed large over Ross Island since it was first seen by Sir James Clark Ross.

Every expedition, even up to the present time, has marveled at its magical and ever-changing presence. Colin Monteath has a long association with the Antarctic and here he gathers, in a beautifully produced book, everything one would want to know about Mount Erebus.

Thirty-three remarkable books were nominated for the 2024 Mills Prize, the second largest number ever received. The other titles nominated were:

- Airriess, Sarah, author and illustrator. The Worst Journey in the World: The Graphic Novel. Vol. 1, Making our Easting Down. Adapted from the book by Apsley Cherry-Garrard. London: Indie Novella, November 2022. ISBN: 978-1638991373.
- Arbugaeva, Evgenia. *Hyperborea: Stories from the Arctic*. Introduction by Piers Vitebsky. New York: Thames & Hudson, October 2023. ISBN: 9780500026229.
- Arnattaujuq, Germaine and Neil Christopher. *Arctic Song: Creation Stories from the Arctic.* Illustrated by Germaine Arnattaujuq. Iqaluit: Inhabit Media, October 2023. ISBN-13: 978-1772274974 (Hardback); 978-1-77227-526-1 (EPUB).
- Bayarsaikhan, Jamsranjav. *Deer Stones of Northern Mongolia*. Hanover, NH: IPI Press; and Washington, DC: Arctic Studies Center, Smithsonian Institution, June 2022. ISBN 978-1-7366902-4-6.
- Burnett, Kristin and Travis Hay. Plundering the North:
 A History of Settler Colonialism, Corporate Welfare, and Food Insecurity. Winnipeg: University of Manitoba Press, October 2023. ISBN: 9781772840520 (Hardback); 9781772840490 (Paperback); 9781772840506 (E-Book PDF); 9781772840513 (E-Book EPUB).
- Chojecki, Jan. The Quest Chronicle: The Story of the Shackleton-Rowett Expedition. Marsh Gibbon, UK: Goldcrest Books International, September 2022. ISBN: 9781913719722 (Hardback Limited Edition); 9781913719715 (Paperback).
- De Pomereu, Jean and Daniella McCahey. Antarctica:
 A History in 100 Objects. London: Conway (an imprint of Bloomsbury Publishing), October 2022. ISBN:
 9781844866212 (Hardback); 9781844866229 (Ebook: Epub & Mobi); 9781844866236 (Ebook: PDF).
- Fitzhugh, William W. Archaeology of Bronze Age Mongolia: A Deer Stone Diary. Hanover, NH: IPI Press; and Washington, DC: Arctic Studies Center, Smithsonian Institution, February 2023. ISBN 978-1-7366902-8-4.
- Flaherty, William. Animals Illustrated: Ringed Seal.
 Iqaluit: Inhabit Media, May 2022. ISBN: 978-1-77227-435-6 (Paperback, Inuktitut); 978-1-77227-370-0 (Hardback, English).
- Hartman, Darrell. Battle of Ink and Ice: A Sensational Story of News Barons, North Pole Explorers, and the Making of Modern Media. New York: Penguin Random House, June 2023. ISBN: 9780593297162 (Hardcover); 9780593297179 (Ebook); 9780593743225 (Audiobook).

- Harper, Kenn. *In Those Days: Inuit and Explorers*. Iqaluit: Inhabit Media, March 2022. ISBN: 978-1-77227-422-6 (Paperback); 978-1-77227-456-1 (EPUB).
- Heidt, Daniel and P. Whitney Lackenbauer. *The Joint Arctic Weather Stations: Science and Sovereignty in the High Arctic,* 1946-1972. Calgary: University of Calgary Press, April 2022. ISBN: 978-1-77385-257-7 (Paperback); 978-1-77385-276-8 (Hardback); 978-1-77385-259-1 (Institutional PDF); 978-1-77385-260-7 (ePub); 978-1-77385-258-4 (Open Access).
- Hossain, Kamrul and J. Miguel Roncero, eds. Arctic Law in 1000 Words. Rovaniemi: Arctic Centre, University of Lapland, September 2023. ISBN: 978-952-337-383-9. Jurdica Lapponica 50. ISSN: 0783-4144.
- Kafarowski, Joanna. *Antarctic Pioneer: The Trailblazing Life of Jackie Ronne*. Toronto: Dundurn Press. May 2022. ISBN: 9781459749535 (Paperback); 9781459749542 (PDF); 9781459749559 (ePub).
- Koonoo, Brian. Animals Illustrated: Arctic Fox. Iqaluit: Inhabit Media, November 2023. ISBN: 978-1-77227-485-1.
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MORE INFORMATION

More information is available on the Polar Libraries Colloquy's website.

THE WILLIAM MILLS BOOK PRIZE

The William Mills Book Prize is awarded every two years and honors the best Arctic or Antarctic non-fiction books published throughout the world. The prize was first presented in 2006. It is named in honour of William Mills, a polar librarian and author, and a core member of the Polar Libraries Colloquy during its formative years.

A full list of all winners and nominations for all years of the Mills Prize is available on the Polar Libraries Colloquy website polarlibraries.org

A call for nominations for the 2026 Mills prize will go out in the fall of 2025, for books published in English between January 2024 and December 2025. The deadline for nominations is March 16, 2026. Anyone is welcome to submit a nomination.

For more information about the Mills Prize, please contact: Julia Finn at millsprize@gmail.com

The Polar Libraries Colloquy, formerly the Northern Libraries Colloquy, was founded in 1971 for the purpose of providing a forum through which librarians and others concerned with the collection, preservation, and dissemination of polar information discuss issues of mutual interest and promote initiatives leading to improved collections and services.

From its origin, the fostering of greater international collaboration has been a central objective. For example, the Colloquy has a membership in the University of the Arctic. The Colloquy meets biennially at venues by tradition alternating between Europe and North America.

Colloquy proceedings are published and are available from Colloquy host organizations. For availability of past proceedings, please see the past colloquies and proceedings page. The Colloquy also publishes a newsletter, Polar Libraries Bulletin (usually two issues per year) and Polar and Cold Regions Library Resources: a directory.



It is time to enforce the seven-year-old Polar Code, which aims to reduce the risk of an accident and loss of life in regions which are still isolated and very challenging.

By Pierre LeBlanc

Opinion

Global warming is gradually increasing maritime access to the Canadian Arctic which has led to an increase of maritime traffic. The immediate concern is not with the traditional annual community resupply shipping companies who are well experienced navigating those waters, but more with adventurers, super yachts, and cruise ships. In the future, in addition to the disappearing ice, the present water restrictions of the Panama Canal, the ongoing security issues with the Red Sea, the relationship with Russia and its Northern Sea Route, and piracy in the Strait of Malacca, we may also see an increase with transoceanic commercial traffic through the Northwest Passage.

More cruise ships are entering the waters of the Arctic Archipelago to experience the fabled Northwest Passage. Unfortunately, cruise ships running aground in Canada is not a theoretical exercise as three of them have already have done so. The *Hanseatic* in 1996 ran aground "because the bridge team did not strictly adhere to the plan that had been prepared for navigating the vessel through the

strait. Relying on a navigation buoy left in the strait from the previous navigation season contributed to the grounding." The MV *Clipper Adventurer* near Kugluktuk ran aground in 2010. Its forward-looking sonar was inoperable. The *Academik loffe* ran aground in 2018 some 78 nautical miles north-northwest of Kugaaruk. In that case, "While transiting the narrows, the officer of the watch was multitasking, the helmsman was busy steering the vessel, and no other crew were tasked with monitoring the echo sounders and keeping lookout. As a consequence, they did not notice the under-keel water depth steadily decrease. The under-keel low water depth aural and visual alarms for both echo sounders were turned off."

Also worrisome is that several fuel tankers have run aground in the Arctic: the Mokami in October 2010, the MV Nanny in February of 2012 and 2014, and the Kivalliq W in October 2022. All of those occurrences were avoidable. Fortunately, nobody was injured, and there was only a minor environmental impact. We might not be so lucky next time.



The rate of oil spills in Canadian waters has dropped significantly as a result of patrols conducted by the National Aerial Surveillance Program. Here, a Dash 8 flies over a cargo ship. ASD Photo

One of the older maritime conventions of the International Maritime Organization is called the International Convention for the Safety of Life at Sea (SOLAS), 1974. It is focused on preserving life at sea through regulations and inspections "to ensure that, from the point of view of safety of life, a ship is fit for the service for which it is intended." The regulations apply to the ship as well as the life-saving appliances. Under SOLAS Regulation 7, Surveys of Passenger Ships, there is a requirement for periodical survey once every 12 months. Specifically, "The periodical survey shall include an inspection of the ... life-saving appliances ... is in satisfactory condition and fit for the service for which it is intended." Life-saving equipment being "fit for service" is very important for ships operating in the polar regions.

The International Maritime Organization adopted a Polar Code in November 2014 with the aim of reducing the loss of life at sea caused by the lack of preparedness to operate in the polar regions which are more isolated and challenging in which to operate. The Polar Code entered into force on Jan. 1, 2017. It sets several standards, such as ship design and construction, and qualifications of the crew and safety equipment on board. Although the Polar Code isn't perfect and doesn't address all the challenges of operating in the polar regions, it was deemed to be a major step in improving operations in those areas. It specifically called for a high standard of design for the survival equipment.

Serious maritime accidents happen almost daily: loss of power, allisions, loss of steering, groundings, and fires. If a ship loses the ability to steer it can quickly get into significant trouble. The recent destruction of the Francis Scott Key Bridge in Baltimore by the ship MV *Dali* provides a clear example of how quickly a situation can lead to disaster when a ship loses its controllability.

Another good example of what could happen took place off the coast of Norway when the cruise ship *Viking Sky* lost power in a storm. On March 18, 2019, the cruise ship *Viking Sky* issued a mayday distress call after engine problems in heavy seas off Norway's western coast. At the time, it was



carrying a complement of crew and passengers of 1,370 people. In very rough seas, the vessel started to drift towards the coast. The sea conditions were such that it was deemed unsafe to deploy the emergency lifeboats. A frantic rescue effort was made to evacuate the passengers and crew by helicopters. In challenging weather conditions and a ship swaying severely in all dimensions, several helicopters managed to airlift some 400 passengers to safety by the time the crew managed to restart one engine, and sail away from the coast. Dozens of people were injured, and several had to be hospitalized. Had the ship ran aground, the waves would have repeatedly smashed it against the shore. Passengers and crew may have had to abandon the ship by jumping into frigid waters without proper protection.

In the case of the Akademik Ioffe grounding mentioned above, the research vessel Akademik Sergey Vavilov provided assistance by taking on board the passengers of the Akademik Ioffe. However, it departed the grounding site for Kugaaruk, Nunavut, to deliver those passengers after having been granted an exemption from Transport Canada to sail with 100 persons more than the vessel's lifesaving equipment capacity. This created another dangerous situation. Fortunately, all were delivered safely.

To contrast these ships, there is the Commandant Charcot of the Ponant Fleet. It is an actual icebreaker, as opposed to an ice-strengthened expedition vessel. It operates with an experienced crew. It has participated in several Arctic search and rescue exercises with national Coast Guards, and is equipped with the latest survival equipment. Furthermore, it has been involved in testing several types of equipment for the passengers and crew to survive several days after abandoning ship.

In the Canadian Arctic, search and rescue (SAR) assets may be hours or even days away depending on where an incident happens. In the case of the Clipper Adventurer near Kugluktuk, it took 42 hours for the Canadian Coast Guard vessel to arrive. In the Canadian Arctic, ships providing assistance face several challenges. They will invariably have to

proceed slowly because of ice-infested water, poor weather, and the fact that much of the Arctic Archipelago is only partly charted. Search and rescue aircraft of the Canadian Forces are located in the south on bases such as Canadian Forces Base Winnipeg. The stand-by SAR aircraft should normally be able to take off within two hours. The faster CC-130 Hercules aircraft will reach the Arctic faster, but they are not equipped with a forward-looking infrared radar (FLIR). They use onboard observers, a much less efficient system.

The new SAR aircraft, the slower CC-295 Kingfisher, with a cruising speed of 260 nautical miles, will reach the Northwest Passage – some 1,100 nautical miles away – in about eight to 10 hours. Because of its limited range of 730 nautical miles, it will have to refuel en route adding to the time to reach the search area. However, they are equipped with FLIR which will make the search more efficient and faster against a very cold background. By then, however, the survivors may have been in cold Arctic waters for 10 or more hours. Unless the survivors have the appropriate level of protection, the search and rescue will likely become a search and recovery operation.

The Polar Code requires vessels that will operate in polar waters to obtain a polar certificate attesting that the ship, its crew, their qualification and life-saving appliance meet the requirements of the Polar Code. The issuance of those certificates is done by the vessel's class societies acting as a "recognized organization" to the ship's flag administration. There are several societies that issue the polar certificates such as the American Bureau of Shipping, Bureau Veritas, and Lloyds Register. Those societies have a duty to perform due diligence prior to issuing those polar certificates.

To increase search and rescue operations in the Arctic, on May 12, 2011, in Nuuk, Greenland, the Arctic Council put in place the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic. It is a legally binding agreement between Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States.



It was recognized that the distances, the weather, and the paucity of SAR assets in the Arctic were such that countries had to work together. This agreement, along with the Polar Code will hopefully reduce the loss of life in the Arctic.

At a recent meeting of the Canadian Maritime Advisory Council, Prairie and Northern Region, Transport Canada has indicated that it will increase the inspection of vessels operating in the Canadian Arctic. This is welcome news as it will encourage ship owners to make sure that their ships have the proper design, that the safety equipment – such as forward-looking sonar – is on board and operational, that the crews are qualified, and that having the proper survival equipment will allow survivors to stay alive for that minimum period of five days.

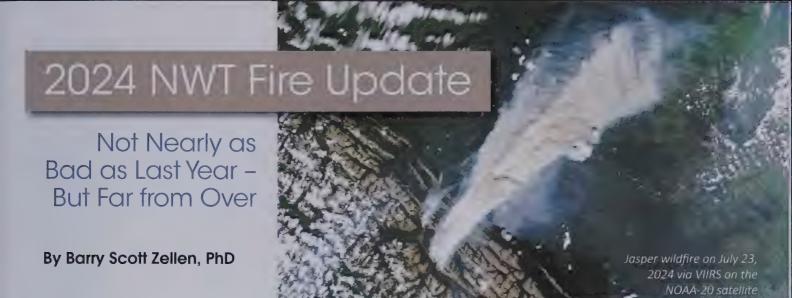
The Polar Code has been in effect for more than seven years. It aims to reduce the risk of an accident and loss of life in the polar regions which are still isolated and very challenging environments. It is time to enforce it in the Canadian Arctic.



Colonel (Retired) **Pierre Leblanc** is an experience Arctic practitioner. White Glacier is one of his clients.

This article originally appeared in *The Hill Times* Canada, May 23, 2024





After last year's Apocalyptic fires engulfed Canada's Northwest Territories (NWT catalyzed the mass evacuation of not only the 20,000 residents of the territorial capital city of Yellowknife, but also a majority of the NWT's overall 45,000 population, it had become abundantly clear that the long-foreseen era of climate refugees had come to the Western Arctic.

Has the Arctic reached a tipping point of no return? We checked back in with our two Arctic climate experts with whom we spoke last year, prolific author and longtime Arctic correspondent for the *Edmonton Journal* newspaper, Ed Struzik, now a fellow at Queen's University's Institute for Energy and Environmental Policy, and longtime *Northern News Service* journalist and editor, James Hrynyshyn, owner of Class M Communications.

With last year's unprecedented wildfires now in our rearview mirror, we asked Struzik how the 2024 fire season compared. "This year," he informed us, "is not nearly as bad as last year, but it is far from over as much of the NWT was put on notice of severe fire possibilities over the Labor Day weekend, which used to be cool and wet." He noted that "residents of Fort Good Hope were evacuated for three weeks early in the summer," and "Deline came close to an evacuation in late August." Reminiscent of last year, he added that the NWT's "highways to the south were temporarily closed and smoke was everywhere. Compared to ten or twenty years ago, this is a severe wildfire season," even if it was less severe than last year's conflagrations. All said, the NWT Fire Map showed (as of

press time on September 3, 2024) a total of 168 fires affecting an area of 1.58 million hectares, of which 90 were active. 83 of these remained out of control, 1 was being held, and 4 were under control. While 78 were declared out.

Facing Future Extreme Wildfire Seasons: 'Prepare for More to Come'

When asked if the NWT had applied lessons from last year's unprecedented fire season and mass evacuations, Struzik observed that the Government of the NWT (GNWT)



"It's pretty clear that the North American Arctic is burning bigger, hotter and more often as Siberia has been for some time." – Ed Struzik

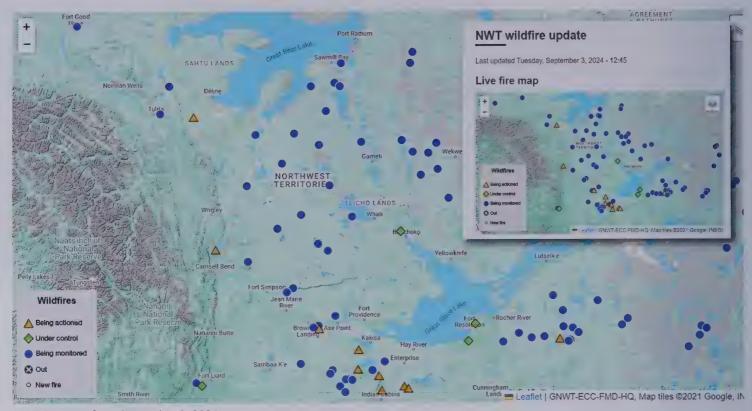
is "working on that now, trying to figure out how to better coordinate and manage evacuations. Everyone acknowledges that firefighters need more people, more air power and more scientific tools to get on top of the situation."

A review of the GNWT's response to the 2023 blazes released in August 2024, according to Yellowknife-based Cabin Radio "found the territory needs more firefighters, more training, better coordination, and better fire modelling to face future extreme wildfire seasons," and that in 2023, it "faced challenges with understaffing, inadequate skills tracking and reliance on retired personnel who may not meet current fitness standards or be up to date with modern fire science."

Of the 568 firefighting experts flown up to the NWT last year were "7 aircraft crew, 9 equipment managers, 444 firefighters, 75 people in technical positions and 33 in general roles." Additionally, Canada's Armed Forces "initially provided 124 personnel to the NWT, with 100 assigned to fire lines and 24 to support fire services," and as the fires intensified, this was scaled up to a peak of 350 military personnel, along with five military aircraft: 2 Hercs, 2 helicopters, and a Twin Otter.

Looking beyond the NWT, Struzik observed that the provinces of British Columbia and Alberta "continued to be challenged by fire as does the NWT. It's pretty clear that the North American Arctic is burning bigger, hotter and more often as Siberia has been for some time." Struzik pointed out that the "Siberian situation is unique in that companies producing firefighting equipment have either left Russia or redirected their production to the war in Ukraine. It's hard to rely on Russian reports, but it seems that the government is becoming indifferent to increasing wildfire challenges."

In the picturesque Canadian Rockies, the resort town of Jasper, Alberta made worldwide headlines in July 2024 when



NWT Fire map from September 3, 2024

it was engulfed and partly destroyed by wildfire – with 358 of Jasper's 1,113 structures consumed by the 39,000 hectare (151 square mile) fire; 25,000 residents forced to evacuate; and the fire still burning more than 40 days later, albeit presently being held: "Jasper, more than any other community in Canada, has been preparing for a fire. Still, they lost a third of the town. If Jasper can burn this big, what about other boreal communities that have done little to address the fire challenge?"

The future of Arctic wildfires remains grim. As Struzik comments: "Each year brings new unexpected, unwelcome surprises. Prepare for more to come."

Hard Questions for a Hotter Arctic

How can we prepare for a future Arctic aflame? James Hrynyshyn offers us a sobering assessment: "The specter of catastrophic local manifestations of climate change should force governments at both nation and local levels to evaluate what's worth saving, and what isn't. Any community that recent history and reasonable futures (based on sophisticated climate models) suggest could be flooded, burned to the ground, or otherwise rendered at least temporarily uninhabitable should be required to produce a contingency plan for the aftermath."

For Yellowknife, whose mass evacuation remains a recent and traumatic memory, Hrynyshyn says "that would mean determining whether the territorial capital should be rebuilt or relocated, although none of the other communities south of the tree line in the NWT would likely present a less-vulnerable profile when it comes to forest fires." Asks Hrynyshyn: "But how does the Canadian government justify spending the billions of dollars that would be required to rebuild the city should it be burned to a crisp?"

He finds hope in the innovative, remote technologies that kept the economy running during the Covid-19 pandemic: "Thanks to the Internet (and Musk's Starlink network), the entire territory could be administered remotely, with only a skeleton crew of sorts living in the drastically scaled back community that would remain. The gold mines are gone, the diamond rush is (almost?) over, and there are no new economic engines idling in the wings. In other words, other than as a traditional homeland for the Yellowknives Dene, and the relatively modest tourism industry, what justification is there for a substantial government-service presence?" Hrynyshyn anticipates that the Dene would oppose the de facto shuttering of the NWT capital city: "Certainly, Dene would resist being relocated, and fair enough, as they were

there long before the modern government came along." As a former resident of Yellowknife with many close professional and personal ties to the community, he has many fond memories from his years in the NWT: "I don't mean to pick on Yellowknife. Enterprise was pretty much destroyed in last year's fires. It is small enough that it might be politically viable to spend the money to rebuild, but again: why?"

These same difficult questions are being asked elsewhere around the world as the realities of climate change and the specter of increasingly uninhabitable homelands come to fruition: "Many low-lying microisland nation states around the world are planning depopulation protocols and agreements with potential host countries. Managed retreat from beachfront communities around the world is inevitable. The Outer Banks is a nice piece of North Carolina, but it's basically one big sand bar that is extremely vulnerable to natural erosion and redistribution patterns, let alone rising sea levels that will wipe it off the map before we're too far into the second century of this millennium - sooner if we're not lucky. Over in Africa, one of the biggest cities in the world, Lagos, is going to have to come up with a way of floating itself into the 22nd century. Again, at what cost?"

Hrynyshyn observes that a "lot of attention is paid to where climate refugees can go. Estimates of their numbers by 2100 range from 100 million upwards of a billion. While it might be tempting to think about putting them in places that climate change will convert from uncomfortably cold but now largely empty to moderately manageable, it would make no sense to move them to places that, while attractive on the temperature scales, are at increased risk of burning down. That puts a lot of Canada, which is largely boreal forest, out of contention."

It's not just wildfires that challenge the Arctic's future. It's also the economic devastation that follows: "the same reasoning would have us rethink other places with obsolete (or soon-to-beobsolete) economies. My hometown of Dryden, Ontario, where 1,500 people used to work in the main driver of the economy, a pulp and paper mill, now has only 150 people working in the pulp mill (the paper plant was shut down decades ago), and it's one of the last pulp mills left in northwestern Ontario. It's only a matter of time before the entire mill shutters, leaving the town in dire financial straits." Such challenges also confront the Arctic: "Like Yellowknife, it is a government administrative (and educational) hub for about 20,000 people, so there will be pressure to keep it going. But it is just as vulnerable to forest fires as Yellowknife. In fact, the hotel I used to work at made a lot of money each and every summer housing and feeding fire crews that responded to fires throughout the region. Sooner or later, Dryden will be at risk. I spent 18 years there but ask to me to justify rebuilding it and I don't think I'd be able to make a good case."

The same can be said for much of the fire-threatened Arctic. As Hrynyshyn puts it, "Adapting to climate change isn't just about how we produce energy, it's about where we live."



Barry Scott Zellen, PhD

Barry Scott is a Research Scholar in the Department of Geography at the University of Connecticut.

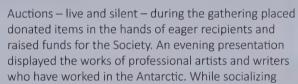


Antarctican Society Members Gather in Colorado

By Guy Guthridge, Board Member, Antarctican Society

The Antarctican Society's first-ever gathering away from the East Coast took place at Colorado Chautauqua in Boulder from August 12-14, 2024. Meetings, dining, and – for most participants – lodging all were within the confines of the Colorado Chautauqua campus. This experimental shift to a mid-continent venue proved successful. It drew 113 participants, 38% more than the last gathering that took place in Burlington, Vermont (2022).

Twelve presentations by current and former participants in the U.S. Antarctic Program anchored the first two days. They updated attendees on the Antarctic response to changing climate, the evolution of scientific diving in the world's coldest water (McMurdo Sound), a first-person reminiscence of the 1966-1967 winter at America's coldest station (Plateau, in East Antarctica), reviews of station leadership and new technologies for the support of science, and an update on geopolitics and environmental protection under the Antarctic Treaty. Three authors of recent books about the Antarctic were among the speakers or in attendance, representing decades worth of Antarctic experiences.



among members and guests was prominent throughout, the last day centered on a picnic at the nearby National Center for Atmospheric Research (NCAR).

The Antarctican Society formed at the end of the 1957-1958 International Geophysical Year by U.S. Antarctic Program participants. Its purpose, to unite persons interested in Antarctica, to facilitate friendly exchanges of information, to encourage increased appreciation of the global importance of Antarctica, and to share enthusiasm for the southern continent. It is not an official part of the U.S. Antarctic Program. It has been active ever since it was formed in 1960, with offerings including a quarterly newsletter, an extensive web site with large amounts of unique information including all past newsletters, an archival service, and in-person activities such as the gatherings described above. Organized as a federal 501(c)(3) public nonprofit corporation, it is "by and for all Antarcticans," and membership by anyone is welcome as described on the website. www.antarctican.org



Last year, I wrote about Antarctic krill (Euphausia superba) in The Polar Times. While krill may be less photogenic than the penguins, whales and seals of the Southern Ocean, they are critically important to Antarctic ecosystems, and is currently one of the main subjects of an important policy discussion happening in the Antarctic Treaty System (ATS): how do we weigh a growing interest in commercial krill fishing against the needs of an ecosystem increasingly under pressure from climate change? This year, there have been some interesting developments in that discussion.

At last year's meeting of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), countries agreed that in 2024 they would hold what they called a "harmonization symposium" to bring together what had previously been separate discussions on krill fishery management and a proposed marine protected

area (MPA) in the Antarctic Peninsula. While in 2022, these same countries had not been able to reach agreement on merging the two conversations, in 2023, the calculations had changed. Some countries wanted an increase in the catch limit for krill, and others wanted the MPA. CCAMLR relies on consensus, and one country therefore has the power to block the whole Commission from making a decision. It was increasingly clear that neither side would support consensus without a package deal.

Combining the two issues makes sense from a scientific and practical standpoint as well as a political one. The Antarctic Peninsula MPA is in the same general area where the majority of krill fishing takes place. Both therefore need to be considered in tandem to ensure that the MPA can meet its conservation objectives, many of which involve the protection of species that feed on krill, alongside a new fishery



management regime that could involve more krill being taken out of adjacent waters. Thus, in July 2024, a small group of CCAMLR countries and observer organizations (including my organization, the Antarctic and Southern Ocean Coalition), met in South Korea to discuss how these two policy goals could be implemented.

This symposium was very different from typical CCAMLR meetings where country representatives sit around a large room behind their national flags and make formal statements for an official record about their national policy positions. At this meeting, diplomats, fishing industry representatives, scientists, and environmentalists were all mixed together, exchanging ideas freely in confidential sessions. The result was a constructive five days of discussion in which participants considered a wide range of options and got into the

weeds – We could close area X to fishing in an MPA protect vulnerable penguins, but would it mean that the krill fishery is too concentrated in other areas, taking away too much food for penguins in area Y?

These are exactly the kind of tough conversations that CCAMLR must have if it is to fulfill its obligation to protect the Antarctic marine environment. Unfortunately, all too often in recent years, CCAMLR approves fishing catch limits but makes little progress on conservation proposals, even when those proposals are backed by large numbers of data sets and sophisticated scientific analysis. This might seem surprising to many readers.

After all, the vulnerability of the Antarctic to climate change is well known, and it seems logical that decision makers would want to be cautious when it comes to expanding a fishery for a species that is known to be highly sensitive to climate change, and is consumed by many species that are themselves affected by climate change. Unfortunately, not all in CCAMLR agree that a high level of precaution is required. In some ways, this mirrors global debates about climate change and environmental impacts—do we admit that our knowledge is imperfect and stand aside and let nature alone, even if it means stopping some activities entirely? Or do we keep on doing business as usual, hoping that if we do the right kind of science and change our ways somewhat, we can avoid outright catastrophe?

The symposium managed to come up with a potential scenario for moving forward with krill fishery management and the Antarctic Peninsula MPA. CCAMLR countries will have to consider the scenario at the annual CCAMLR meeting in October 2024 and decide if they want it to be adopted. These will likely be tough negotiations. Nevertheless, ASOC was encouraged by the nature of the discussions. After years of stalemate and sometimes circular arguments at formal meetings, it was at least refreshing to have frank discussions that focused on specifics and solutions – even if those solutions made everyone a little bit unhappy. We'll need more discussions like these in the years to come if the Antarctic Treaty System is to continue living up to its obligations to protect the world's last great wilderness and the irreplaceable species that call it home.

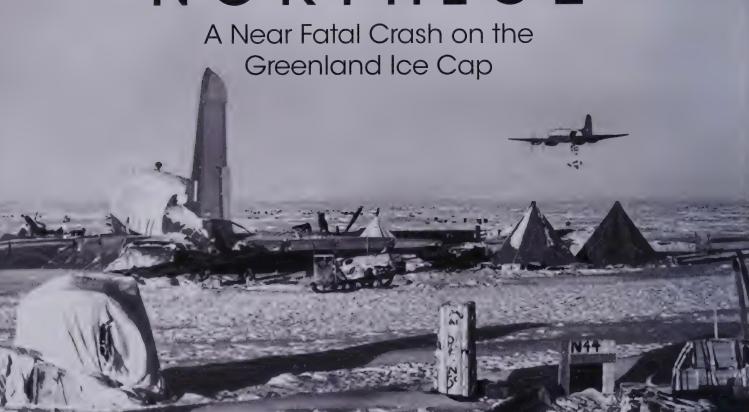
Claire Christian, MA



Claire Christian is the Executive Director of the Antarctic and Southern Ocean Coalition (ASOC), which represents environmental NGOs at meetings of the Commission for the Conservation

of Antarctic Marine Living Resources (CCAMLR) and the Antarctic Treaty Consultative Meetings (ATCMs). Her goal is to make Antarctica's invertebrates (including krill) as beloved as penguins and other megafauna. Claire can be contacted at claire.christian@asoc.org.

NORTHICE



By Gerald Johnson, PhD

The crashed Hastings aircraft became a supplemental storage space and work area for the remaining two years of the project.

"The crash followed so swiftly that one of the crew said afterwards that the first he knew about it was that a thousand icy-cold needles stabbed his checks. They were snow particles. Then he saw the radio operator with blood streaming down his face. Their plane was on the Ice Cap with a broken port wing."

(author unknown)

In 1952 the British began a two-year project on the Ice Cap. Officially named "The British North Greenland Expedition" but traditionally referred to as the "North Ice Expedition," it was led by Commander C. J. W. Simpson of the Royal Navy. The expedition obtained significant research results, but today it is remembered more often for a plane crash that occurred during the first year.

Having established a supply base, Britannia Sø, just inland from Greenland's east coast during the summer of 1952, Simpson and five members of the expedition began sledging westward across the Ice Cap. Their goal was to establish a camp midway between the east and west coasts. Twentyfour days later, just short of their intended goal and with their dogs becoming exhausted, they called a halt to their journey and established the camp.

The camp, named "Northice," was to house three men for the coming winter and provide support for more extensive operations during 1953. Air support was necessary to furnish the camp with the materials and supplies essential for the extended exploration.

Simpson had arranged for the Royal Air Force to fly some eighty tons of supplies which had previously been shipped by sea to Thule. They were to be airlifted and dropped from a cargo plane. Two four-engine Hastings planes had been flown to Thule for this mission, and each plane was to make one round trip per day. Allowing for bad weather and maintenance, it was calculated that the operation would require about three weeks. On reaching Northice, the planes would repeatedly fly over a designated drop area and release their loads. The more sensitive equipment (radios, instruments, generators, etc.) was

parachuted from an altitude of about 800 feet. Less delicate material (food, fuel, etc.) was free-dropped from a much lower altitude of 50 feet. The time required to make both drops was about ninety minutes.

The higher parachute drops were fairly routine, but the lower 50 foot free-drops were another matter. At this low altitude the plane's radio altimeter, which penetrated through the snow to ice below, was unreliable. This forced the pilot to rely on his visual acuity which was often impaired given the white featureless surface of the Ice Cap.

The first Hastings flight from Thule was successful in carrying out both drops. The next day the second Hastings flight took off from Thule with its load for Northice. Once it completed the high-altitude parachute drops, the pilot brought the plane down to 50 feet for the free-drops. He made a practice run over the drop zone then lined the plane up to make the actual drop. As the plane approached, it flew into a white-out, and the pilot was unable to estimate his altitude. As the crew prepared to make the drop, the tip of the left wing dug into the snow. The pilot kept the plane from cartwheeling as it skidded dangerously across the Ice Cap for one and one quarter miles before coming to a halt. A description of the incident, from the April 1966 issue of *Look and Learn* (used here with permission), follows:

The crash followed so swiftly that one of the crew, Lance Corporal B. Hussey, said afterwards that the first he knew about it was that "a thousand icy-cold needles" stabbed his cheeks. They were snow particles. Then he saw the radio operator, Flight Sergeant Burke, with blood streaming down his face. Their plane was on the Ice Cap, with a broken port wing.

Appalling danger threatened as fire broke out, but the disciplined crew put the flames out so quickly that they averted what could easily have been complete disaster.

They were a mixed crew of twelve – seven from the R.A.F.; four from the Army; one from the U.S. Air Force. All were shaken and bruised, and three had bad injuries. Flight Sergeant Burke had been hurled against his radio panel and cut about the head; the American, Captain Charles Stovey, had two ribs broken; an Army representative, Major D. S. Barker-Simpson, had a fractured ankle.

While some rendered first-aid, others curtained off a part of the aircraft as a sick bay. The intense cold was crippling, and a biting wind was sweeping across the Ice Cap. The point where they had crashed was 8,000 feet above sea level.

The survivors worked furiously to line the fuselage with seven layers of parachutes. Some spread sacking on the floor, and two small paraffin vapor heaters were set going. All these just got the inside temperature to zero [F] – and that was a stupendous triumph, for outside it was thirty-five degrees below!

All knew that only the speediest action could save them before their strength gave out in the quite inadequate shelter provided by their freezing wreck. Help was immediately available from Commander Simpson and the other five members of his expedition, but they had only limited resources.

They were 450 miles from the American base at Thule, and 350 miles from the base the British North Greenland Expedition had set up near the east coast. Their plight was desperate indeed.



The tail of the crashed Hastings remained above the snow in 1967 during a visit by the author.

News of the crash was flashed to Thule and thence to Topcliffe, the plane's home base in England. There were frantic efforts at both places to devise some means of rescuing them. And while ideas were called for, the sufferings of the survivors were eased by airdrops of extra clothing, sleeping bags, food, and a bigger heater [which was damaged beyond repair in the air drop]. Much as these comforts helped, it was galling to see the big transports fly over so close without any possibility of landing.

Would-be rescuers considered and rejected scores of ideas. Perhaps a big helicopter could be flown from America? Perhaps Simpson's dog teams could be used to transport the three injured men to the east coast base camp? Perhaps some way could be found for getting the injured men to a place level enough for a ski equipped plane to attempt a touch-down?

In any event, cruel weather made any active rescue bid impossible for several days. All this time the marooned men could only shiver inside their crashed plane, except when lulls in the weather allowed brief working spells for trying to hack out the semblance of a landing strip against the possibility that some plane might be able to risk a landing.

But soon the long Arctic winter would shroud the Ice Cap, and some experts said that rescue would not be possible until the following year. Others insisted that a bid must be made to bring off the injured.



In the United States a Grumman Albatross amphibian was specially fitted with jet-assisted take-off (JATO) equipment and flown to Thule. With a plane in Thule that was capable of landing on the ice, it was decided that a rescue attempt should be made. The risk was immense, for no one knew if the plane could land on the Ice Cap without damaging itself, or, if once down, would it ever be able to get into the air again.

The risk was taken! There were breathless moments when the squat, sturdy plane arrived and was put down as close to the wrecked Hastings as possible. The waiting men watched with their hearts in their mouths as it came lumbering to a stop, spurting great showers of snow and ice.

The injured men were rushed to the Albatross, but the plane was already freezing fast to the Ice Cap. A feverish battle followed as all hands hacked at the ice. It was a below-zero battle that went on for an hour until, with the aid of JATO, the plane began to shudder and flounder along the makeshift airstrip. Then with a stupendous heave, it became airborne once more.

After the Albatross had vanished in the all-enveloping whiteness, the survivors examined a gift the rescuers had left behind them – a frozen slab of 100 lb. of beefsteak. Even using a heated saw, it took an hour to hack off enough slices for a meal. But no steak was ever more appreciated!

There remained the problem of getting the remaining nine survivors away. By luck it chanced that an experienced Greenland flyer, Colonel Bernt Balchen, was visiting Thule and was able to direct a scheme. A Dakota [a twin engine transport better known as a C47 or DC3], fitted with skis, and carrying JATO equipment was to fly from Thule with two other planes — one to give navigational aid and the other to act as pathfinder. The rescue plane had been flown to Thule, with the others, from a base in Newfoundland, 2,000 miles away.

This aerial cavalcade finally took off from Thule the morning of September 26th and arrived over the downed Hastings three hours later where the ski equipped Dakota landed beside the wrecked plane. It stayed on the Ice Cap for ninety minutes while vigorous efforts were made to improve the "home-made" runway. Then with the nine survivors aboard, it ploughed down the runway until the JATO bottles fired and the plane became airborne.

Three hours later the rescued flyers were snug in hospital cots in the Thule hospital reading letters from home.

And the wrecked Hastings? It took on a new role. It became a supplemental storage space and work area for station personnel for the remaining two years of the project. Even then, its useful life was not over. Fifteen years later, in 1966 and 1967, it was occasionally visited by personnel from Project Blue Ice. Their operational base, Inge Lehmann Station, was located about 10 miles from Northice. Individuals from the station accessed the plane by clearing the snow away from the flight deck port and entering through the opening. They were probably the last individuals to access or even see the Hastings. In a few years, it would be totally buried and completely disappear from view.

¹"An Expedition Supply Plane Crashes on the Greenland Ice-Cap" Look and Learn, April 2, 1966. Issue #220



Gerald W. Johnson retired from the University of Minnesota in 2004 as Professor Emeritus of Civil Engineering. A forty-year career in surveying, mapping, and astronavigation took him to the four corners of the earth, including seven Arctic expeditions. This article is excerpted from the second book in his Arctic series, Beyond the Edge: Accounts of Historic, Significant, and Little-Known Expeditions on the Greenland Ice Cap.



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John H. Dearborn photo, from HERO Collection Antarctican Society

In the Spring / Summer 2024 issue of *The Polar Times*, an article was published on the R/V HERO (HERO) Foundation and efforts of the Antarctican Society to preserve and continue her legacy. Since the publishing of the article, the Antarctican Society archivist, Charles Lagerbom, drove from Maine to the west coast to retrieve several items and equipment from the former National Science Foundation research vessel *HERO*.

During HERO's years of decline, several interior pieces of equipment had also been stripped from the vessel, with the intent to sell them. A HERO associate, D. Kent Yates, became aware of the plan. He purchased much of this equipment in hopes of keeping the pieces intact and preventing the dispersing of the ship equipment.

Yates maintained these items and when he heard of the Antarctican Society efforts to bring *HERO* ship parts back to Maine, he graciously donated these items to be included in the growing repository of ship materials for curation, conservation and eventual exhibit.

HERO UPDATE

By Charles Lagerbom

HERO former first mate Willie Wilson, from Everett, Washington met with the author to catalogue the equipment and prepare for the author's return journey.

As a result, several hundred pounds of *HERO* material were brought back. Items include *HERO* life rings, two half doors to the Chief Engineer's storage locker, *HERO* life jackets, electronic panels from the engine room, ventilation funnels, caged lights, speakers, various *HERO* radios, gyro-compass, magnetic compass, sonar and other bridge equipment as well as many other pieces of equipment and ship gear. There were also banners and paperwork from its post-Antarctic west coast life and other ephemera.



MORE INFORMATION

For further information or interest in the Antarctican Society or to help with the *HERO* preservation efforts visit www.antarctican.org



The author with the help of former first mate, Willie Wilson, load and stow the HERO equipment aboard the pick-up.



Several hundred pounds of equipment, gear and materials were loaded and lashed down, including the red mesh personnel carrier sled.



The items now back in Maine unloaded for temporary holding to be sorted, cleaned and cataloged prior to their donation to a local maritime museum.



Charles H. Lagerbom Charles H. Lagerbom is the Antarctican Society archivist and former Membership Chair of the American Polar Society. Charles spent two field seasons working in the Dry Valleys of Antarctica with a glacial geology research team from the University of Maine Quaternary Institute, now the Climate Change Institute. He is author of *The Fifth Man: Life of Henry Bowers* (1999), *Maine Whaling* (2020) and *Maine and Cape Horn: The World's Most Dangerous Voyage* (2021). He can be contacted at clagerbom@rsu71.org.

WACKY WALRUS FACTS!

Discover these massive marine mammals of the Arctic with the hilarious scientific name, *Odobenus rosmarus*.



By Larry Rechlin

The Polar Times Editor

1. There are two sub-species of walrus

Atlantic walruses live in in the seasonally ice-covered northern waters of Canada, Greenland, Norway and Russia. Pacific walrus has a wide range between Russia and the US (Alaska), from the Bering to the Chukchi Seas, as well as the Laptev Sea. There's thought to be around 25,000 Atlantic and around 200,000 Pacific walrus in the wild. The Pacific Walrus tends to be larger and have longer tusks.

2. Walrus tusks can be over 90cm long!

Speaking of teeth, walruses have some whopping canines! Both male and female walruses grow long tusks, which help them adapt to Arctic life.

These massive, marine mammals use their tall tusks like ski poles, digging them into sand, snow and ice to help them haul their enormous bodies out of the freezing ocean waters! Plus, they're great for smashing through tough ice from below, creating breathing holes for swimming walruses to catch a breath.

3. Thick layers of blubber protect walruses from the cold

These massive animals don't carry all that weight around for no reason! The thick layers of blubber (fat) stored beneath their skin helps walruses stay insulated, keeping them warm and protected from cold. In fact, thanks to all that *brr*-illiant blubber, walruses are able to withstand freezing temperatures, as low as-35°C!

4. Walruses weigh up to 1.5 tons!

Even baby walruses are huge! These chunky critters, known as calves, can weigh up to 75kg at birth – that's the same weight as some adult humans!

5. Their huge size comes from a steady diet of mollusks, crustaceans, and worms!

Walruses are rarely found in deep water as they prefer feeding at the bottom of shallow waters.

Walruses grub on shellfish like clams from the sea floor, but they also enjoy sea cucumbers and mussels. Adults will sometimes hunt fish, while some huge adult males have even been recording stalking seals.



Editor Comments: I continue to offer a variety of articles to meet the needs and interests for the wide range of readership of *The Polar Times*. Having spent a considerable amount of my career in the educational field, I would be remiss if I did not include something for our younger adventurists. My grandchildren love to peruse my copies of *The Polar Times*. I hope that other readers share their issues with friends as family members, especially the younger ones. If you have any feedback and comments from our young readers, I would appreciate it you could please share them with me.

AMAZING ADAPTATIONS!

Walruses have super sensitive whiskers, which help them detect food at the bottom of the ocean. Once they've located a tasty snack, walruses can be surprisingly speedy swimmers, reaching speeds of up to 35km/h to chase down their prey!

6. Both male and female walruses have tusks

Walruses use their tusks to haul themselves out of the water and onto the sea ice. Their tusks are also used for keeping breathing holes open in the ice, fighting with other walruses, and for defense against predators.

7. Walruses can sleep in water!

Walruses prefer to rest on sea ice. Atlantic walruses routinely also rest ashore in the summer and autumn, as feeding grounds in the Atlantic are closer to land.

Sometimes, walruses will forage in places where there's no nearby ice or land for them to haul themselves out onto for nap. That's why they have handy 'pharyngeal pouches'— air sacs on their throats that inflate like pillows!

Once their pouches are filled with up to 50 liters of air, walruses can doze off, snoozing in a vertical position and kept safe from drowning by their portable pillow – genius!

8. Walruses can live for up 40 years

And it shows. Most of them carry a vast map of scars on their skin – wounds inflicted in disputes with fellow walrus during the breeding season. Walruses have very few natural predators, and their huge size makes them a challenging opponent! Only an orca or a large polar bear would dare try to take on an adult walrus...

9. These astonishing animals are very sociable, but can be aggressive

A walrus colony is a noisy place! These animals live in large groups, known as herds, which gather together on land. Out of the water, the walruses loudly bellow and snort at one another to communicate! They communicate using visual displays and sounds such as growls, taps, knocks, grunts, soft whistles, rasps, and clicks.

During the mating season, male walruses can become very aggressive as they fight for females using their tall tusks.

Walruses are highly susceptible to disturbance and noise. During their mass gatherings, stampedes can occur as easily spooked walruses attempt to reach the water.

10. Indigenous Americans are the only people allowed to hunt walruses

Sadly, humans are the biggest predator that the walrus has ever faced. During the 1700-1800s, walruses were almost hunted to extinction, as their meat, tusks, oil, and skin were valuable materials.

Now, walrus hunting is illegal for everyone except for indigenous groups like the Inuit, for whom walruses are still a major life resource.

11. Walruses are very sensitive to changes in their environment

Despite their formidable size, walruses are easily spooked! In walrus herds, any sign of danger can cause stampedes as the animals flee land and head towards the safety of water.

12. Mother walruses are very protective of their young

A female walrus can get very protective of her calf. She will pick it up with her flippers and hold it to her chest if it's threatened before diving into the water to escape predators. Walruses have young fairly infrequently, so it is vital for them to protect their offspring. Baby walruses are normally born between mid-April and mid-June, during the walrus migration north. Calves are normally born on the ice.

13. Pacific walruses spend spring and summer feeding over a huge continental shelf

They feed on the shallow continental shelf in the Chukchi Sea. These walruses use sea ice for resting between feeding bouts, breeding, giving birth and nursing their young, as well as for shelter from rough seas and predators.

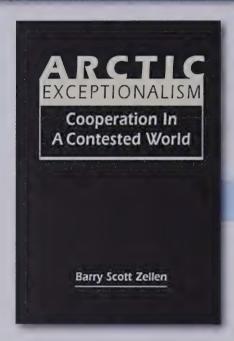
14. The greatest threat to walruses is climate change

Melting sea ice means more Pacific walruses are resting on land, further from their feeding grounds. These ever-growing gatherings can be deadly, especially for young calves.

And as the Arctic opens up to more shipping, tourism, industry and noise, the Atlantic walruses are at greater threat of disturbance, and therefore stampedes.



Book Announcement



ARCTIC EXCEPTIONALISM

Cooperation in a Contested World

By Barry Scott Zellen, PhD Lynne Rienner Publishers, 2024, 335pp.

On July 23, 2024, Dr. Barry Scott Zellen's newest book, *Arctic Exceptionalism: Cooperation in a Contested World* was published by Boulder, Colorado-based Lynne Rienner Publishers. This is Zellen's 14th book (and 11th monograph) presenting a structural analysis of the historic endurance of "Arctic exceptionalism," a state of regional cooperation, collaboration and peaceful order that has lasted more than three centuries. It is a result of the convergence of the region's distinct geography and isolation from the world system with the stabilizing influence of what Zellen has long called the "fourth image" in world politics; a distinctly tribal level of analysis that remains salient in the Arctic as well as throughout much of the Global South.

Zellen, a Research Scholar in the Department of Geography at the University of Connecticut (UConn) and a Senior Fellow in Arctic Security at the Institute of the North, began writing Arctic Exceptionalism: Cooperation in a Contested World at the beginning of the COVID-19 pandemic while a Fulbright scholar in Iceland at the University of Akureyri during the Spring 2020 semester, where he taught a graduate class on Arctic security as conceptualized through the lens of International Relations (IR) theory and where he presented a public talk on the historical and structural foundations of Arctic cooperation, that lay the foundation for this book. The onset of the COVID-19 pandemic that semester would impact his project in many profound and challenging ways.

Within weeks of his Iceland arrival, much of the world went into lockdown and before long, campuses closed, and research migrated online. As borders closed, travel came to a halt worldwide, and field-research became all but impossible to pursue. Hunkered down thousands of miles from home, Zellen's project quickly pivoted from what was conceived as a field-based study of Arctic security and sovereignty

comparing predominantly Inuit Greenland with its neighbor Iceland, to a more theoretical and historical analysis better suited to the protracted lockdown of the pandemic – yielding the first draft of his new monograph by the time he finally returned home in May 2020.

His manuscript was nearly completed at the time of Russia's full-scale invasion of Ukraine in early 2022, and it originally ended on a high note, celebrating the Arctic Council's 25th anniversary and its laudable, and largely uninterrupted, first quarter century of Arctic cooperation. But the resulting collapse in Arctic circumpolar unity presented a new, unexpected, and unprecedented challenge to Arctic cooperation. Zellen resumed his writing, developing an in-depth discussion of challenges to Arctic cooperation catalyzed by Moscow's 2022 invasion, after which Arctic exceptionalism, for so long a defining characteristic of Arctic international relations, teetered on the brink of obsolescence as a new Arctic Cold War loomed.

"The dizzying pace of events catalyzed by Moscow's invasion of Ukraine transformed the tenor of Arctic international relations, and it took me another two years to complete the necessary updates," Zellen noted. The effort was well worth the effort. The book has received favorable endorsements from many scholars around the world, including the following:

ENDORSEMENTS

Dr. Julian Reid, philosopher, political theorist and Professor of International Relations at University of Lapland observes, "Zellen offers a thoroughly unique perspective on Arctic exceptionalism. Readers of this book will be led to think differently about the Arctic and its geopolitical futures, and the underlying theories of peace and war which have shaped knowledge of the Arctic in International Relations. Zellen does not sit on the fence. He intervenes in several debates concerning both the history and future of the Arctic and pinpoints the weak spots of dominant approaches to its geopolitics. I urge every scholar of Arctic International Relations to read this book."

Dr. Alun Mark Anderson, author of After the Ice: *Life, Death* and Geopolitics in the New Arctic (2009) and past editor-inchief and publishing director of New Scientist (1992-2005) writes: "Great book ... The Arctic's exceptional history of peace and cooperation is under threat from new tensions and hasty decisions. Zellen provides a unique analysis, tempering realism with optimism, of the deep roots of Arctic exceptionalism. This is not simply a book about Arctic exceptionalism, and the long history of peace and cooperation that sets this region apart, but also a call for action. Zellen's unique analysis of Arctic exceptionalism's roots and the forces that created it, tempering realism with optimism, tell us that the region can weather current tensions and keep cooperation growing. No previous author has provided such an insightful analysis of Arctic exceptionalism, its deep roots, resilience and the forces that could end or save it. With the unique period of pan-Arctic peace and collaboration now under threat as never before, it is urgent reading for every stakeholder who wants to see the region's cooperative spirit continue into the future. Every Arctic stakeholder should read this book and feel empowered to push the Arctic to a better future."

Dr. Heather N. Nicol, Director of the School for the Study of Canada and Professor of Geography in the School of the Environment at Trent University, describes: "This book takes a fresh look at some of the ways in which the Arctic has been

positioned on the global stage. Zellen reworks notions of exceptionalism and sovereignty in support of a new range of possibilities for the future of the Arctic region. The broad ranging discussion in this book pulls together the various threads of analysis that have informed geopolitical assessments of the Arctic region, shedding light on the long-standing and mutually constitutive relationships between the region's Indigenous Peoples and Arctic states. Exceptionalism and self-determination are positioned as the result of the long-standing and pragmatic colonial and globalized architecture of Arctic international relations. Well worth the read."

Dr. Timothy R. Tangherlini, Professor of Scandinavian, U.C. Berkeley, opines: "An important and timely reminder of the vital role of the Arctic in a period of increasing global volatility. In this new volume, Zellen adds to his already formidable scholarship on the Arctic, weaving together the critically important considerations of the indigenous and clear avenues for productive engagement with the Arctic predicated on notions of cooperation and consensus. A welcome departure from the super-power-centric views of much Arctic scholarship, Zellen highlights the importance of the indigenous and the Nordic for a holistic understanding of the political, cultural, economic and geographical exceptionalism that marks the Arctic, charting a way forward for the ongoing negotiations that may lead to a sustainable Arctic."

FEATURED PHOTOGRAPHER | JOHN WELLER

Emperor Penguins and Icebergs, Ross Sea



Book Announcement



THE ARCTIC A DARKER SHADE OF WHITE

By Sebastian Copeland Foreword by Dr. Jane Goodall ISBN: 978-0-8478-3168-5 / Rizzoli New York

Release date: October 2024

With his unrivaled photography taken during multiple expeditions, Copeland transports us to the Arctic to share the heart of the polar cap as never before seen. The Arctic is one of the last true wildernesses on the planet, and its demise should ring the alarm for lower latitudes. Copeland's multifaceted background – not only a polar explorer, awardwinning photographer, and established author and journalist but also a dedicated environmental advocate – offers us a unique vantage point from which to appreciate this lonely

spot. Although the vision presented in these pages may be poetic, the book's aims are pragmatic — to inspire and help foster a transformation toward a sustainable future. *The Arctic: A Darker Shade of White* is a gateway into Copeland's intrepid journeys as he takes us along and unveils some regions of the globe that had rarely — if ever — seen a footprint before. It is an intimate and visually arresting ode to the human pursuit of exploration inside Nature's most remote and otherworldly theater.





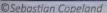


About the Authors: With approximately 6,000 miles under his skis in the polar regions, **Sebastian Copeland** has led numerous expeditions to the North and South Poles on foot. Noted as a photographer "who has produced works that are of outstanding artistic merit and communicate messages of urgent global significance," Copeland has addressed

audiences at the UN, universities, and many Fortune 500 companies to warn of the systemic transformations

taking place in the polar regions and their geopolitical consequences. In 2017, *Men's Journal* named Copeland one of 25 of the world's top adventurers of the last 25 years. The Arctic completes a polar trilogy comprising *Antarctica: The Waking Giant* (2020) and *Polar Explorations* (2022). Copeland was named four times Photographer of the Year. In 2019, he was knighted by French President Emmanuel Macron in the National Order of Merit; and the National Order of Arts and Letters. **Dr. Jane Goodall**, known for her landmark chimpanzee study, is the most recognizable figure in conservation today.







©Sebastian Copeland



Myths, Mystery and Modern-Day Intrigue

The Franklin Expedition was the most tragic attempt to try to find the Northwest Passage, a route from Europe to Asia in the northern hemisphere, which could save thousands of miles compared to the already known routes around the Cape of Good Hope or Cape Horn.

Two sturdy ships, HMS Erebus and HMS Terror, departed from Greenhithe, Kent, on May 19, 1845 and vanished forever with 129 men aboard. They left behind a thick fog of mystery which has not been entirely solved yet, despite the discovery of the shipwrecks during the last decade.

The search for the Northwest Passage had been an obsession for England, and then the British Empire, ever since the discovery of the American Continents by Colombus, Cabot and Vespucci. Such a passage would revolutionize international trade, saving an invaluable amount of time and money to merchant companies. The search reached its climax during the nineteenth century when the Royal Navy had ships and men sitting idle after the end of the Napoleonic wars. John Barrow, the Second Secretary of the Admiralty by that time, saw the availability of officers, men and navy ships as a unique opportunity that he didn't want to miss to achieve one of his most persistent fascinations.

All beginnings are hard, and as if to confirm this saying, the first two approaches launched by Barrow in 1818, commanded respectively by David Buchan and John Ross, two veteran officers of the Royal Navy, were equally unsuccessful. John Franklin became an important part of this search after having participated in several expeditions to try to locate the passage. After accompanying Buchan in 1818 during the first attempt to cross the frozen polar sea north of Spitsbergen, he led two more overland expeditions, one in 1819-22 to the mouth of the Coppermine River (located at Coronation Gulf, an arm of the Arctic Ocean., and again in 1825-27 to the mouth

of the Mackenzie River (located in the Beaufort Sea). Both expeditions contributed to the discovery and mapping of an important part of the northern coast of the American Continent.

Franklin almost lost his life from starvation during the first expedition to the mouth of the Coppermine River. The explorers had to resort to eating the rotten carcasses of deer hunted the previous season and even the leather of their boots. He lost eleven men from various causes — voyageurs, native guides and an officer who was killed in cold blood by one of the voyageurs. Almost every possible misfortune happened to him. During that journey he learnt an indelible lesson about the rigors of the Arctic and earned him the title of "the man who ate his boots", which would accompany him to the end of his days and beyond.

While Franklin was walking across the wild north of Canada, William Edward Parry, who had been ordered to sail his two ships as far as possible into an unexplored opening on the western shore of Baffin Bay called Lancaster Sound, had established a record westward longitude, reaching almost to the western exit of the Passage. An insurmountable barrier of ice had prevented him from finishing his job, but this promising and early feat encouraged John Barrow to persist, so more expeditions were sent one after another to try to get through it.

After many failed attempts, which meant the loss of some ships and men, the frustrated Second Secretary decided to see if he would have better luck in the Southern Hemisphere. In 1839 he sent the popular James Clark Ross, veteran by then of several Arctic expeditions, one of which made him discoverer of the North Magnetic Pole, to find its antipodean twin – and to explore, while he was at it, the Antarctic Continent. The expedition was so successful that the Second Secretary decided to try to resume activity in the North. Ross was logically the first option to command the expedition Barrow had in mind, but

tired of the adventurous life and wanting to settle and start a family, Ross declined the offer. The vacancy was offered instead to an aged but eager Franklin, who, depressed after a horrible experience as governor of Van Diemen's Land, needed badly to restore his reputation.

Franklin's mission was to complete the map of the Canadian Archipelago. A great deal of the work had already been done, and by then, only a couple of blank areas remained undiscovered.

Franklin himself had almost found a passage close to the north coast of America after his two overland expeditions, which between them mapped the continental coastline over some 44 degrees of longitude from Point Turnagain, east of the Coppermine River (in 1821), westward to a point less than 300 km from Point Barrow, Alaska (in 1826), where a ship-based expedition led by Frederick William Beechey, which had entered the passage by Bering Strait, expected to have contact with him.

On expedition for the Hudson's Bay Company in 1836–39, Thomas Simpson and Peter Dease continued the survey of the coast eastwards from Point Turnagain, eventually reaching the west coast of the Boothia Peninsula. So, two partial routes had been found; one that you could get into from the Atlantic and one you could get out from into the Pacific. Franklin had the mission to simply connect these two promising passages.

The Franklin Expedition of 1845 was designed to be the final push that would bring a triumphant conclusion to all the efforts made prior to that time; the equivalent of the Apollo 11 mission to land on the moon. The chosen ships were the same used for the Antarctic expedition, the Erebus and Terror, which had demonstrated they were equal to the task of fighting against the ice. However, this time they were supplied with some additional improvements. Maybe the most important ones were the addition of steam engines and screw propellers, which had the intention of allowing the ships to be able to follow leads among the ice floes if the wind was low, and to minimize the risk of being trapped in the ice. Though steam had already been used by John Ross's paddle steamer, the Victory, in a former expedition, Franklin was pioneer on using this much less bulky way of propulsion. The ships also carried a daguerreotype camera, balloons for sending messages, and supplies intended to last from three to five years according to the most optimistic predictions. No effort was spared in preparing and equipping the voyage, yet everything went so horrendously wrong that the expedition was fated to be the most tragic polar expedition of all time.

The ships were last seen at the center of Baffin Bay by two whalers in July 1845. Witnesses said that spirits were high and that conditions ahead looked promising. But both ships and crews then disappeared, never to be seen alive again.

Alarms sounded in 1847, in a great measure excited by Lady Franklin, and from them on, expeditions were sent by



the Admiralty by land and by sea to try to locate Franklin and his men. The result of these efforts, which led to the loss of several further ships and some men, was not at all satisfactory. The only palpable clue about the fate of the expedition was the finding, on Beechey Island, of Franklin's winter quarters (1845–46) together with the graves of three sailors. In 1981 a team of scientists led by Owen Beattie and John Geiger performed the autopsies of the three bodies, reaching the conclusion that lead poisoning could have been the reason for their deaths.

It would take years for the searchers to find the first clues about the fate of the expedition. John Rae, a Hudson's Bay Company employee who had also provided major contributions to filling in some of the blanks on the map of the Canadian labyrinth, found in 1854 decisive evidence that the outcome of the expeditions had been fatal. The testimonies of Inuit groups he met, together with a good number of items coming from the lost men, closed the circle. Their tales told horrifying stories of starving crewmen resorting to cannibalism, men falling to the ground while walking, sinking ships and more in a remote island located in the very heart of the Arctic, King William Island.

It was obvious from the news that was provided by Rae that things hadn't gone well, and there was little or no room at all for hope. Not happy with this awful news, which seemed to place a question mark over the honorable conduct of Franklin's expedition, Lady Franklin launched her own search to find more definitive evidence. She blamed Rae for not having gone on to King William Island to check for himself what had happened, and for believing the Inuit testimony without skepticism.

Leopold McClintock, a veteran of previous Arctic expeditions was sent to find Franklin. He commanded the yacht Fox in 1857 on a voyage organized by Jane Franklin. He and his colleagues made astounding discoveries, which helped us to understand better what had happened. He found the only written message to have survived the expedition, in a cairn on the northern shore of King William Island, which said, among other things,



Lost Crew Members

that Franklin had perished in June 1847. The note also said that the ships had been trapped by the ice for two winters near the northwest part of the island and had been abandoned in April 1848 by the 105 remaining men to reach the mouth of the Great Fish River, on the continental coastline south of King William Island, also called the Back River.

McClintock found a good number of skeletons, graves and even an abandoned boat, everything underlining the conclusion that there was no chance of finding survivors, and that it would be meaningless to continue searching. Only years later did the American Charles Francis Hall (on two expeditions from 1860 to 1869), and a later US expedition led by Frederick Schwatka (1878–80) reach King William Island again in search of further clues, and to interview all the Inuit they encountered. The testimonies they gathered, together with McClintock's ones, formed a mass of vivid scenes which are even nowadays very hard to put together to have any idea of what may truly have happened.

The finding of the ships – Erebus west of the Adelaide Peninsula on the continental coast and Terror, by chance in Terror Bay (named by McClintock without knowing the ship had sunk there), on the south coast of King William Island – are adding some new evidence that increases the mystery. The international community, following the archaeological work being done, awakens every morning with the hope that a journal has been found inside the wrecks revealing the whole story.

The general opinion, based on the track of graves, bones and boats discovered along the west and south coast of King William Island, and supported by the Inuit testimony, is that, after having abandoned the ships, the crews walked south along the shore, manhauling the ships' boats, which had been put on heavy sledges. They finally reached Simpson Strait, separating the south coast of King William Island from the continent. Some of the men eventually crossed, only to perish, it seems, soon afterward at a place which was given the descriptive name Starvation Cove. However, the location of the ships – far from where they were abandoned but relatively close to where the expedition's final scenes played out – suggests the possibility that at a certain point

one or both ships might have been remanned by a party who decided to come back to them.

Speculation more than facts is the keynote when trying to reconstruct what happened. The more likely scenario is that scurvy took the more important role in the tragedy. In many cases, even only during a single winter, scurvy worsened the health of the men so rapidly that it took a heavy toll from one to five deaths. It is easy to imagine what impact three winters could have had on the Franklin expedition, especially when they were trapped in one of the most barren and isolated grounds of the Canadian archipelago.

Of course, starvation also played a role, as the evidence of cannibalism suggests. However, it is likely that it only affected those who abandoned the ships and had to drag their own supplies, and not to those who would have remained on the ships. The expedition carried provisions for three years which some assure could last five years so, in theory, lack of food should not have been an issue to any that were still in range of the ships.

Probably no member of the expedition was skilled enough in hunting or fishing the local game to live off the land or knew the appropriate techniques to survive in winter conditions. Only later did it become common for explorers to adopt Inuit equipment, techniques and way of life thus increasing their range of action and margins of safety.

Apart from scurvy and starvation, it has been widely debated whether mutiny could have played a role in the tragedy. The elevated number of deaths among the officers after the third winter (9 out of 24), suggests that possibility, though nothing is mentioned in the only note left by the expedition. Other causes, like an outbreak of trichinosis, boats capsizing, and lead poisoning caused by the defective welding on the food cans supplied to the expedition, also emerge from the books, articles and social media conversations of those trying to solve the mystery.

Although there were no survivors, some Inuit testimony said that three or four men lived with them for one winter, likely in 1850, before departing the following summer to try to find

help. A mysterious tin box was found at Baker Lake by Farley Mowat in 1948, considered by some as belonging to the Franklin Expedition. Some believe that maybe one or two last survivors could have made it almost to the shores of Hudson Bay, and that this box could have been left by them there but that hasn't ever been proven.

The design of the Franklin Expedition was, it is easy to see in retrospect, based on mistaken assumptions. For starters, the number of crewmen should have been much lower. Sending 129 men to the Arctic was almost a death sentence if they had to abandon the ships, as actually happened. The Inuit, masters of survival, move in small groups and are almost always in constant movement to find food here and there. They struggled every day to feed their families, especially during the winter, and rarely had to submit to awful sacrifices. But of course, the expedition's planners never thought it likely they would have to abandon the ships.

As a result, more than a hundred men, sick of scurvy, perhaps consumption (tuberculosis), and weak after years of confinement and a poor diet, were condemned to die from the moment they put a foot outside the protected snow globes in which they came to the deepest Arctic.

How could things have been different? Scurvy, which was most likely the primary killer, not only to polar expeditions but on any ship involved in long voyages, was not successfully combatted until years later, when the sickness was finally understood, and techniques were developed to deal with it at the beginning of the twentieth century. By the time of the Franklin Expedition and even centuries before, it was already known that citrus, like lemon juice, had an antiscorbutic effect, but after months it loses its properties. The best way to fight it is consuming fresh food, vegetables, meat, etc. Inuit live in the harshest and most isolated conditions, yet they don't suffer scurvy. An exhaustive analysis of their way of life could have led not only to the knowledge about how to fight this plague but also how to deal with the other factors that were surely responsible for their demise. The adoption of the basic Inuit techniques of survival would have meant a passport for living. It took months for the explorers who showed interest in learning how to build an igloo appropriately, how to hunt seals, caribou and reindeer, or fishing and travelling by dog sled, which would not only have saved them from starvation but also from becoming weakened by scurvy. These are not trivial skills, and it could take an entire life to learn how to do them well.

The expedition would have had a much better chance of success if it had been composed of a much smaller group of men, maybe only by experienced members of the Hudson's Bay Company, who were the only Europeans used to living in these conditions. They had learnt, through decades of cohabitation with indigenous people and Inuit and adopting many of their habits, as was the case with John Rae, Thomas Simpson and Warren Dease, paradigms of successful Arctic

travelers. It wasn't a coincidence that they were always accompanied by indigenous people, Inuit, or mixed-race voyageurs and guides who were accustomed to surviving in these regions. When Inuit groups encountered the Franklin men in groups as large as forty or so - badly dressed, sick, weak, and dragging huge boats – they surely panicked at the

> prospect of being asked to feed so many men, far beyond what a small group of hunters could sustain in a country with little game.

> Again, with hindsight, we know that the very concept of trying to find a passage in big naval ships was misconceived, since many parts of the route are through waters too shallow for them. The fact that previous expeditions had not suffered a similar fate must be considered a matter of luck, and it must be remembered that their aim was to find a navigable passage for cargo ships, so their stubbornness on persisting with the idea is understandable.

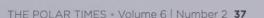
passage was eventually made by Roald Amundsen in 1903-06, it was in a much smaller ship – a herring schooner – and even then, they frequently struck bottom.

When the first successful voyage through the

Blaming the Franklin Expedition for bad preparation or command is not entirely logical, as the expeditions that preceded and followed them were not any better prepared - just luckier. John Ross, during his expedition of 1829-33, came very close to finding a similar end as Franklin. He too, had to abandon his ship and spent four winters in the Arctic, but with a much smaller crew to feed, being able to use a huge cache of provisions left by a previous expedition, and being closer to shipping lanes where they were able to seek help from whalers, led them to be able to tell their story.

It was Roald Amundsen who, from 1903-1906, demonstrated that a small ship manned by a small crew and advised by Inuit was the most appropriate way to navigate the passage, something that he did in four years. He also demonstrated the futility of having discovered it for commercial purposes.

The Franklin Expedition had a deep impact on the consciousness of explorers of the time. It was a time when news started to run around the world more quickly and books were translated into several languages. Its impact could be considered similar to that of the Uruguayan Air Force Flight 571, which vanished in the Andes for months till the survivors managed to summon help and told a terrible story of survival that shocked the world. There was, however, an important difference between them: in the plane crash, all events are known through the accounts of the survivors, but from the Franklin Expedition almost everything is unknown. There were no survivors, and all we have are skeletal remains, graves, cairns, a single note, two sunken ships and a lot of Inuit testimony and lore that sometimes tell the most bizarre stories. There is nothing more captivating than having hundreds of clues on the table, like pieces of a puzzle, and trying to reconstruct a story from them, which varies depending on where these pieces are placed. If a journal



Sir John Franklin

were found in one of the ships or dug out from a cairn, telling the whole story, surely the essence which keeps alive and together the interest of so many people around the world would change dramatically.

The final drama of the Franklin Expedition, which talks about tragedy, suffering and, morbidly, about cannibalism, is just the tip of an immense iceberg. Once one starts to get deeper into the story one gets immediately absorbed into all the variables that shape the story. It is not just the Franklin Expedition itself, but all the surrounding stories connected to it. There are love stories, envy, ambition, suffering, death, honor, etc. — a plethora of ingredients that are combined to form a haunting story that attracts people of very different backgrounds and interests.

Archaeologists are delighted to read how the relics were found in the desolate ground of King William Island and are being found now in the ships. Historians like to dig into the background of the different actors who participated in it. Geographers love what this expedition represented to the discovery in one of the most complex regions of the world. Forensic investigators and doctors wonder about the ultimate causes of their deaths.

Books written about the story continue to appear on the bookshelves. To date more than one hundred books have been written about the subject and the number keeps on growing. Every year several books are published in different countries, sometimes historical, but there is also an increasing number of fictional books. Russell Potter, one of the scholars with the greatest knowledge about the

expedition and about polar exploration in general, once published in his blog *Visions of the North*, a post titled "The Essential Franklin Bookshelf". Some of the titles he recommends are: *Sir John Franklin's Last Arctic Expedition* by Richard Cyriax; *The Fate of Franklin* by Roderick Owen, a Franklin descendant, which through his fresh style gives some new approaches to the mystery; *Unraveling the Franklin Mystery* by David Woodman, about the Inuit testimony; *Fatal Passage* by Ken McGoogan, who always creates an inspiring atmosphere; and *Frozen in Time* by Owen Beattie and John Geiger, who describe the autopsies performed on the three members of the expedition buried on Beechey island.



The Franklin story has also reached the screen, though it has not yet inspired movies as other polar stories have. The release of the superb fictional TV series *The Terror*, based on Dan Simmons's novel of the same title, captured the interest of an enormous number of people who quickly wanted to learn more about what truly may have happened.



My obsession with polar exploration history started many years ago. I think it was the natural step after being hooked by mountain stories for almost my whole life. My first approach to the polar world started, as many others did, reading about the race between Scott and Amundsen

to reach the South Pole, the incredible feats of Fridtjof Nansen, Salomon Andrée's bold and tragic attempt to reach the North Pole by balloon, Umberto Nobile's first and second flights by dirigible, and so on.

By that time, reading about expeditions that happened during the last part of the nineteenth century seemed like far enough back in time, but mentions in these books to former expeditions brought my attention to what had happened fifty years before them, specially to those which had ended so dramatically, like the Franklin Expedition. I traveled to Scotland and started to buy polar books in every bookshop I entered. By chance I discovered Ken McGoogan's books *Fatal Passage* and *Lady Franklin Revenge*, and then I got completely hooked. I wanted to know more, so I started to try to locate the books mentioned in the bibliographies of the books I bought. I discovered then an invaluable source of information. All the

books of that period were scanned and available for free on the internet, so it was then that I started reading Franklin's account of his first overland expedition.

I did not want to forget everything I was reading so in 2012 I decided to start my blog KABLOONAS to share my thoughts. It was at that time that my brother called my attention to some other blogs focused on the Franklin Expedition, and I contacted their authors Peter Carney, William Battersby and Russell Potter, and decided to start writing in English since, apparently, my blog was not working well for the Spanish audience. Then someone pointed out that there was a Facebook group dedicated to the Expedition, and I decided to join it. At the beginning it was formed of barely 150 members, since then, and especially after since *The Terror* series was released, it has grown to the more than 3,000 members it has now. And that was the end — once one gets involved in one of these social media groups, one gets hooked forever because one forms part of a small society where virtual and real friends are made.



MORE INFORMATION

For more enecdotes related to Arctic polar explorations, visit Andrés Paredes' Blog.



